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61 AGATGCTGCTGCGCTCGAAGCCCTGCGCTGCCGCCGCGCTGATGCTGCTCCTGGGC  
M L L R S K P A L P P P L M L L L L G P  
121 CGCTGGTCCCCCTCTCCCCCTGGCGCCCTGCCGCCGACCTGCGCAAGCACAGGACGTCGTGG  
L G P L S P G A L P R P A Q A Q D V V D  
181 ACCTGGACTTCTTCACCCAGGAGGCCCTGACCTGGTGAGGCCCTGTTCTGTCCGTCA  
L D F F T Q E P L H L V S P S F L S V T  
241 CCATTGACGCCAACCTGGCCACGGACCGCGGTTCTCATCCCTGGGTTCTCCAAAGC  
I D A N L A T D P R F L I L L G S P K L  
301 TTGCTACCTTGGCCAGAGGCTTGTCTCTGCGTACCTGAGGTTGGGACCAAGACAG  
R T L A R G L S P A Y L R F G G T K T D  
361 ACTTCCTAATTCGATCCAAAGAAGGAATCAACCTTGAAGAGAGAAGTTACTGGCAAT  
F L I F D P K K E S T F E E R S Y W Q S  
421 CTCAGTCACCCAGGATATTGCAAATATGGATCCATCCCTCTGATGTGGAGGAGAAGT  
Q V N Q D I C K Y G S I P P D V E E K L  
481 TACGGTTGGAAATGGCCCTACCAAGGAGCAATTGCTACTCCGAGAACACTACCAAGAAAAGT  
R L E W P Y Q E Q L L R E H Y Q K K F  
541 TCAAGAACAGCACCTACTCAAGAACGCTCTGAGATGTGCTATACACTTTGCAAACGTGCT  
K N S T Y S R S S V D V L Y T F A N C S  
601 CAGGACTGGACTTGATCTTGGCCTAAATGCGTTATTAAAGAACAGCAGATTGCAAGTGG  
G L D L I F G L N A L L R T A D L Q W N  
661 ACAGTTCTAATGCTCAGTTGCTCTGGACTACTGCTCTTCAAGGGTATAACATTCTT  
S S N A Q L L D Y C S S K G Y N I S W  
721 GGGAACTAGGCAATGAACCTAACAGTTCTTAAAGAAGGCTGATATTTCATCAATGGGT  
E L G N E P N S F L K K A D I F I N G S  
(T)  
781 CGCAGTTAGGAGAAAGATTATTCATTCAGGAACTTCTAAAGAAAGTCCACCTTCAAAA  
Q L G E D Y I Q L H K L L R K S T F K N  
(F)  
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1381 CTGACAATCCAAGGTATAAAAGAAGGAGTTAACCTGATGCCATAACCTCCATAACG  
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R P L G P H G L L S K S V Q L N G L T L  
1561 TAAAGATGGGATGATCAAACCTTGCCACCTTAATGGAAAAACCTCTCGGCCAGGAA  
K M V D D Q T L P F L M E K P L R P G S  
1621 GTCACTGGGCTGCCAGCTTCTCATATAGTTTTGTGATAAGAAATGCCAAAGTTG  
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A C I

Fig. 1

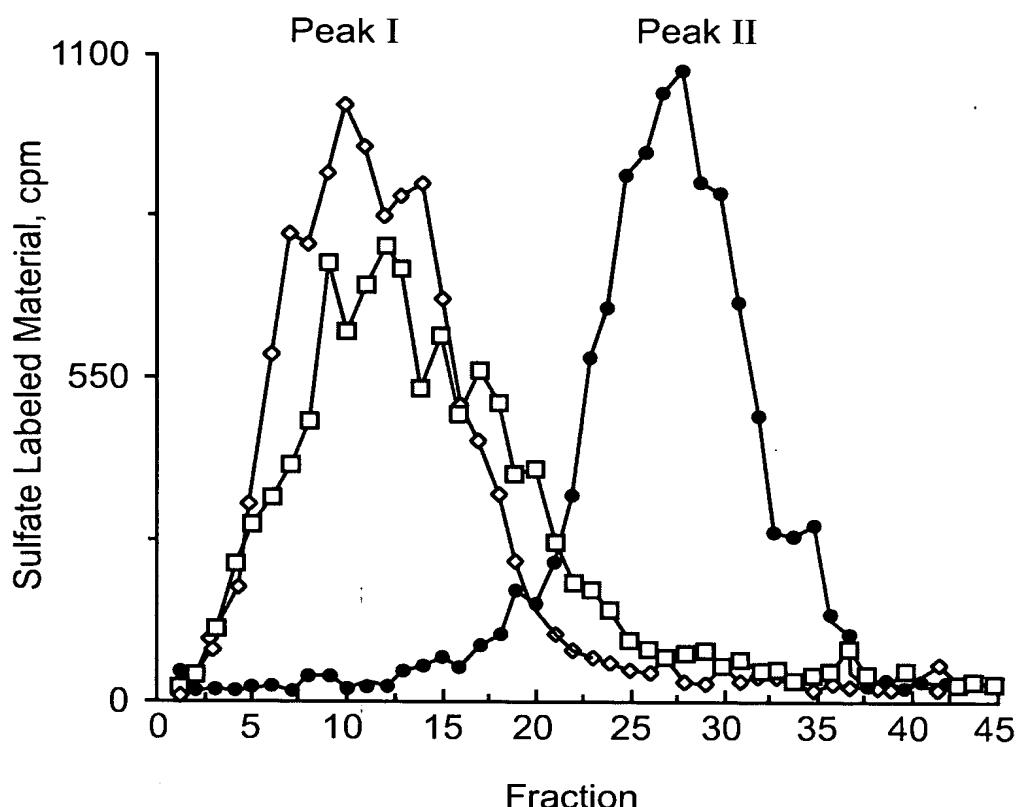


Fig. 2

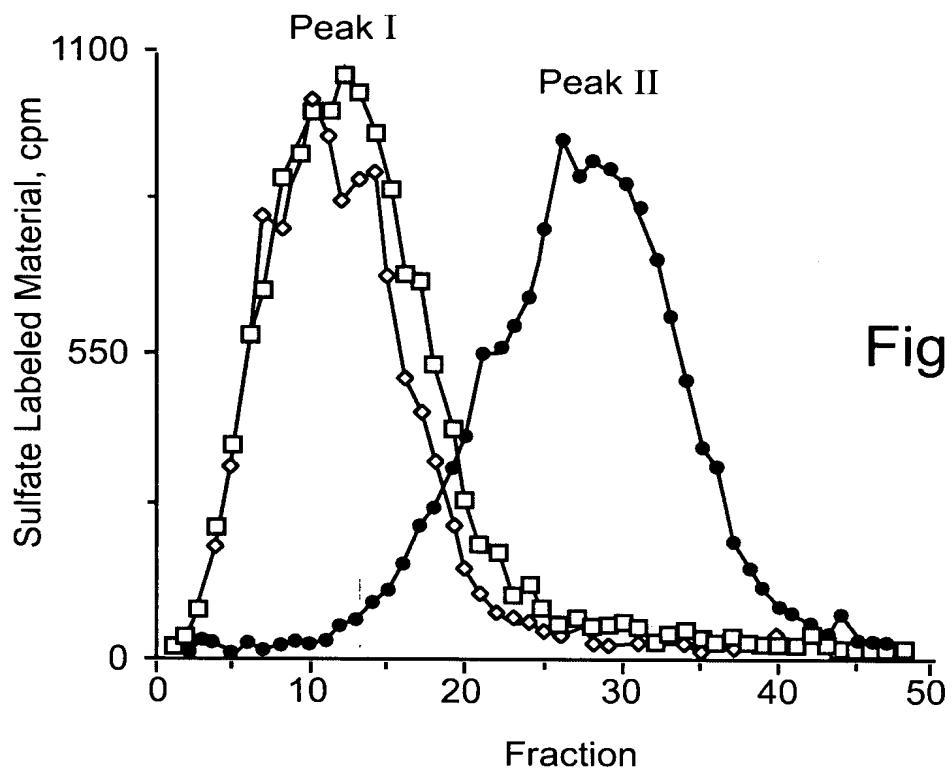


Fig. 3a

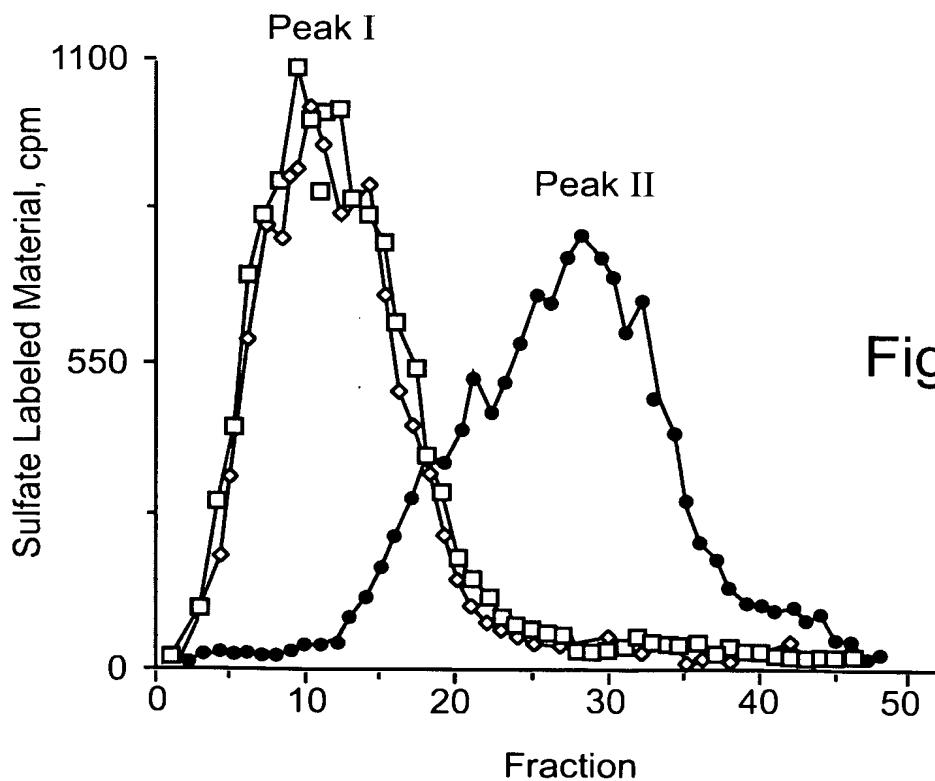


Fig. 3b

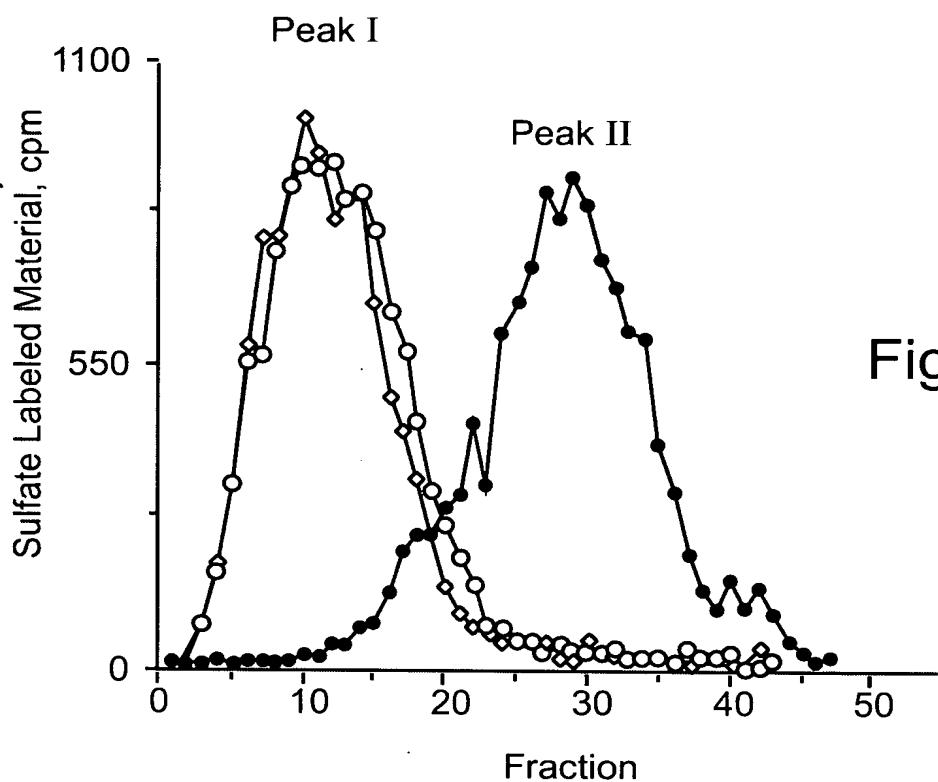
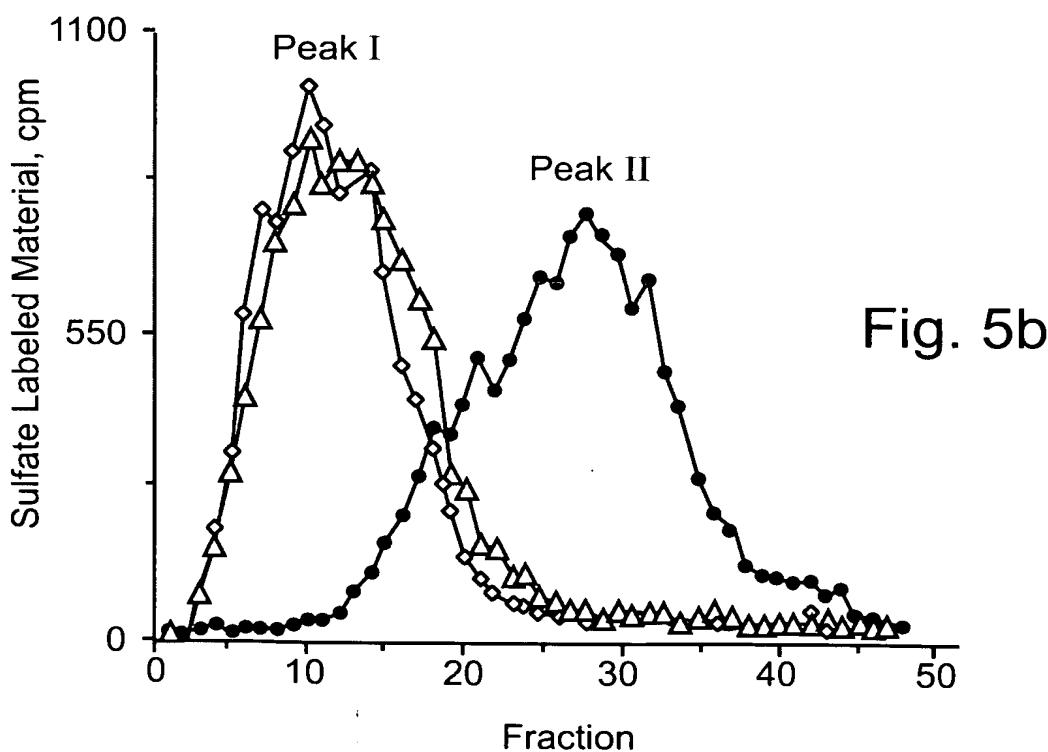
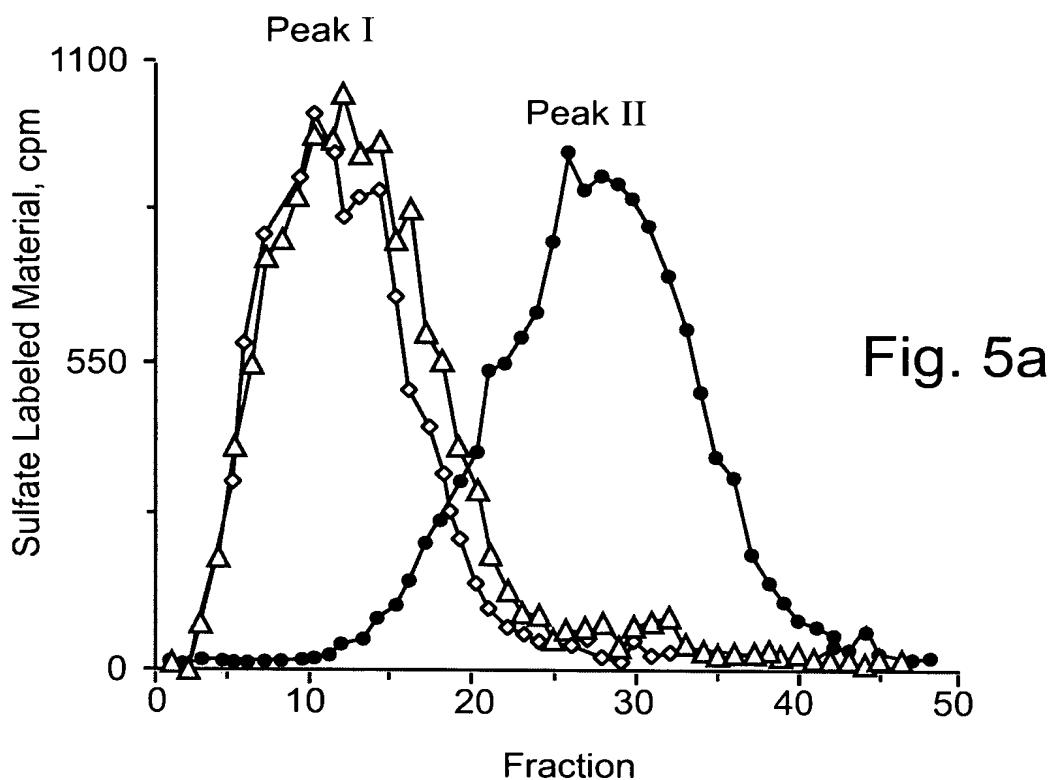
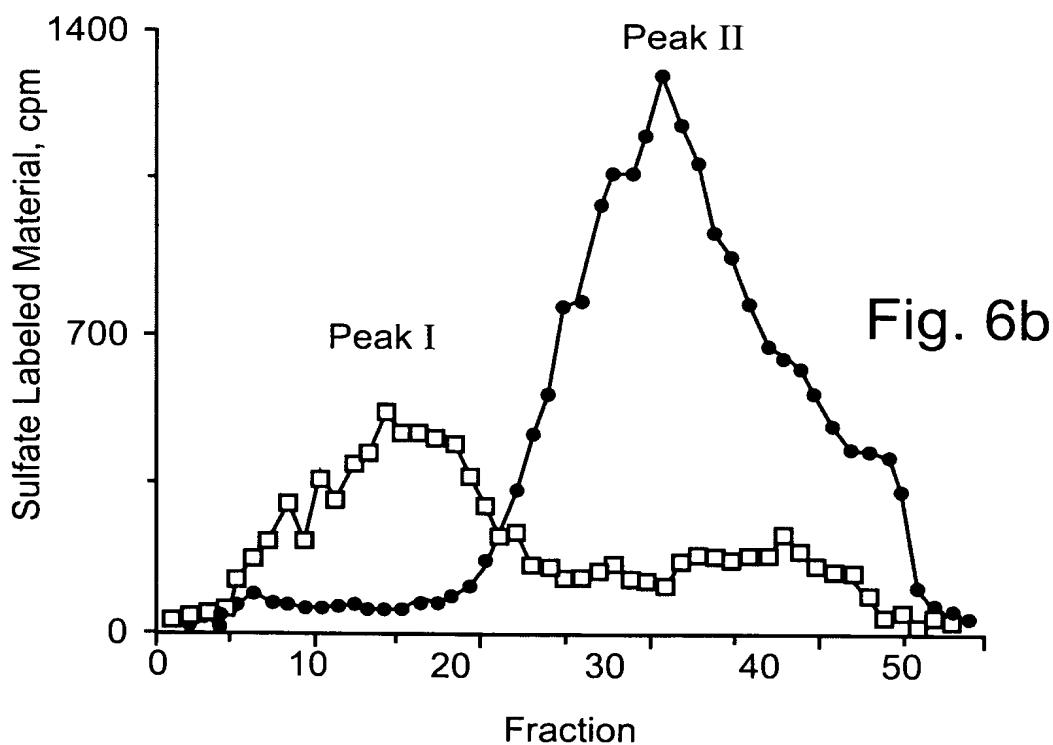
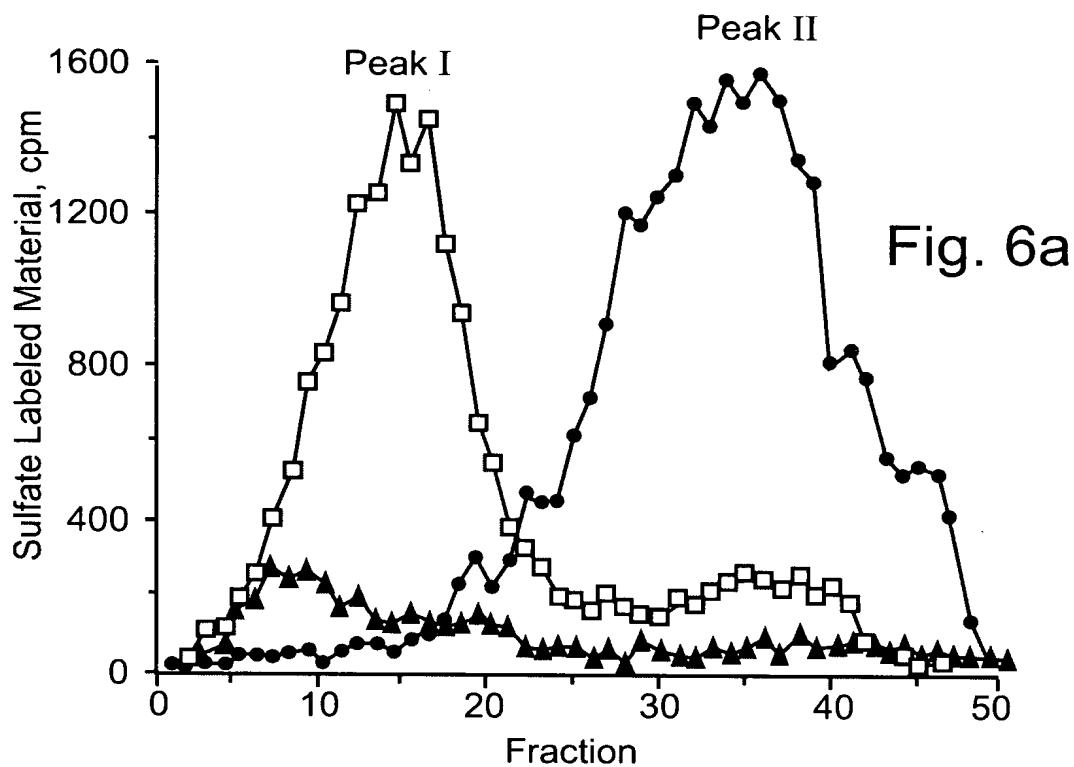


Fig. 4





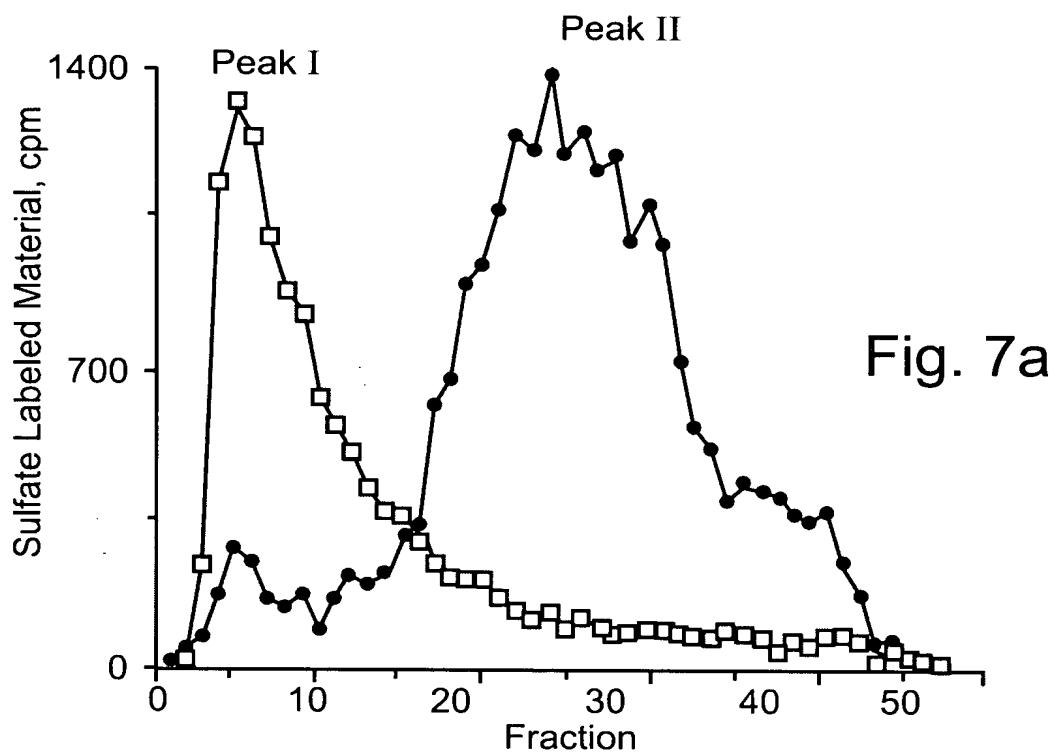


Fig. 7a

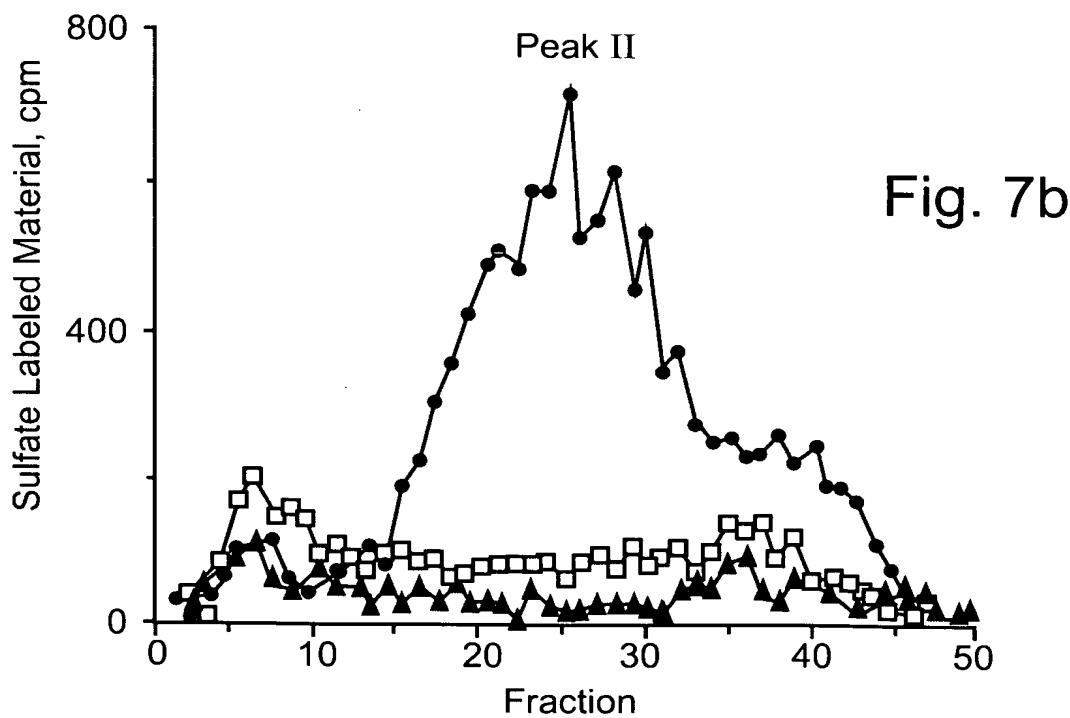
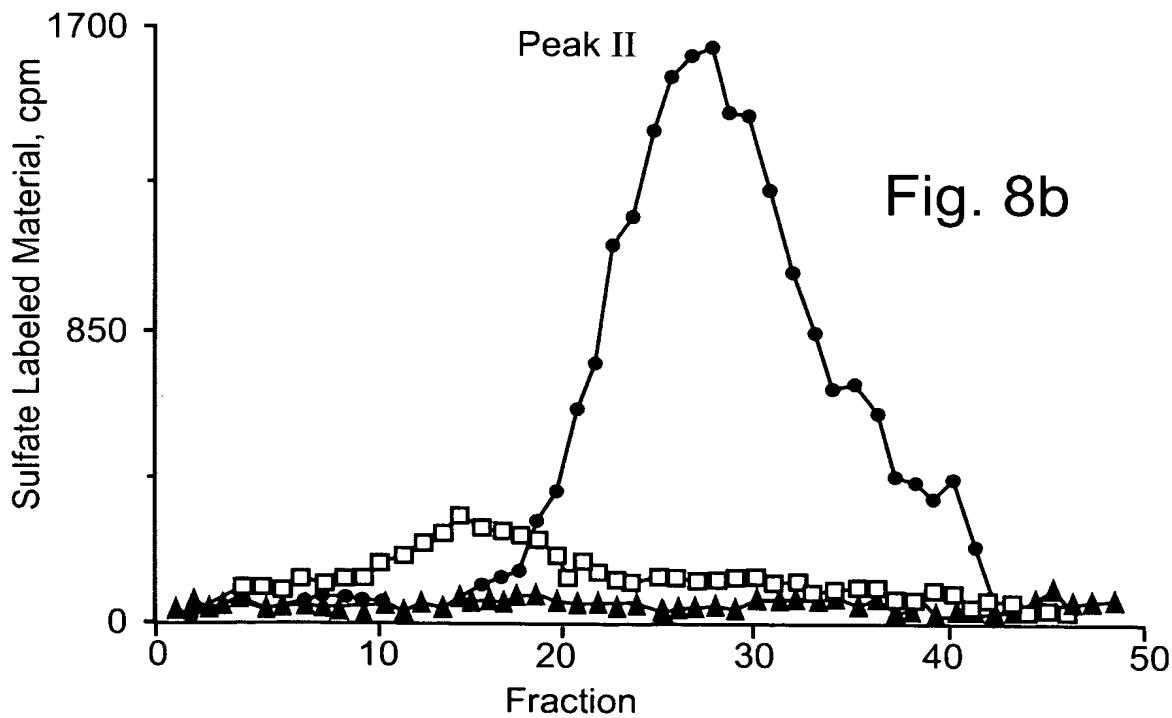
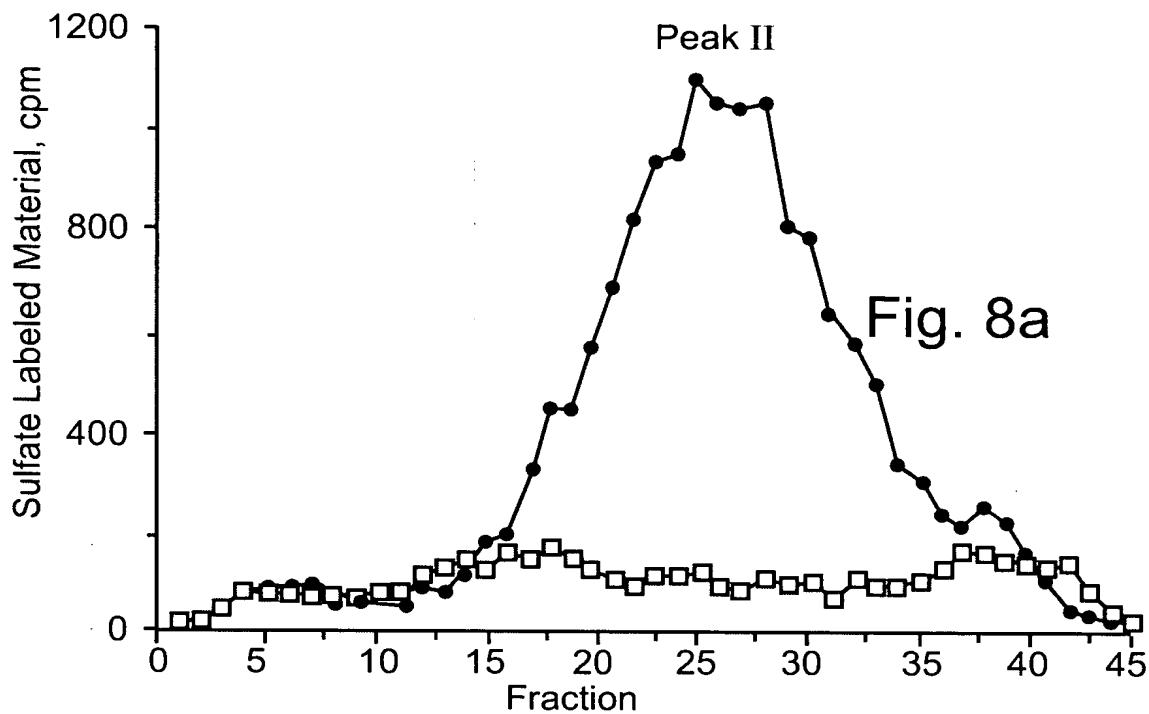
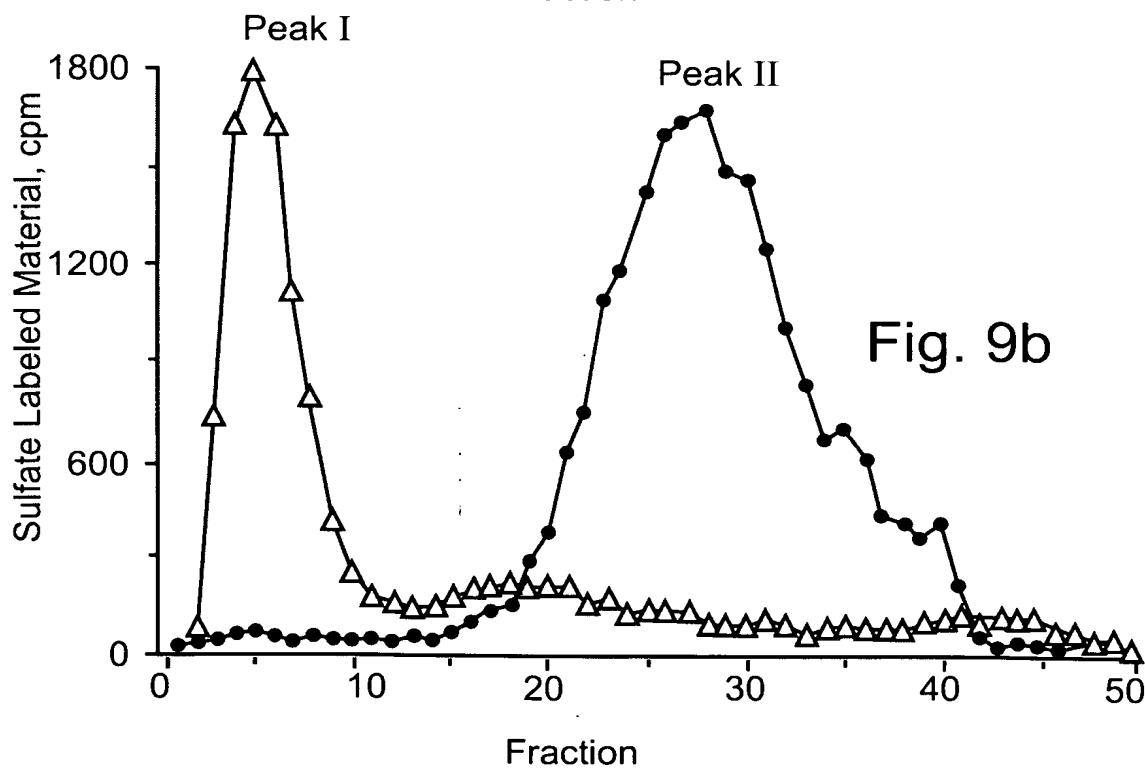
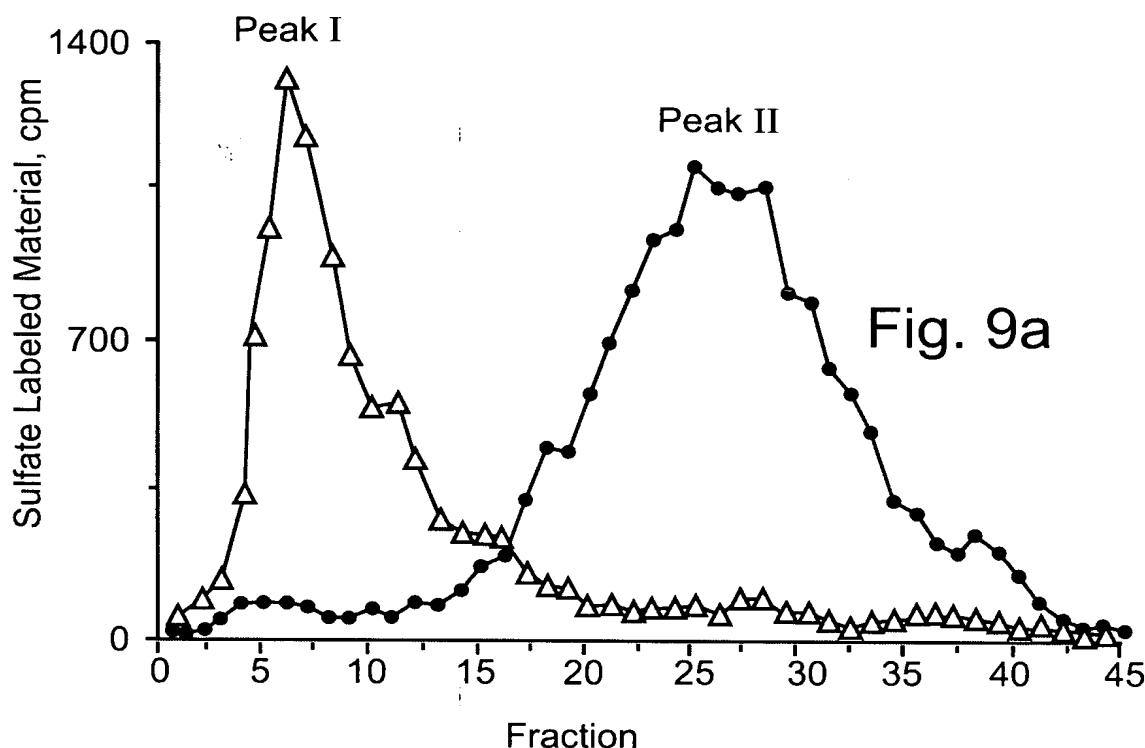


Fig. 7b





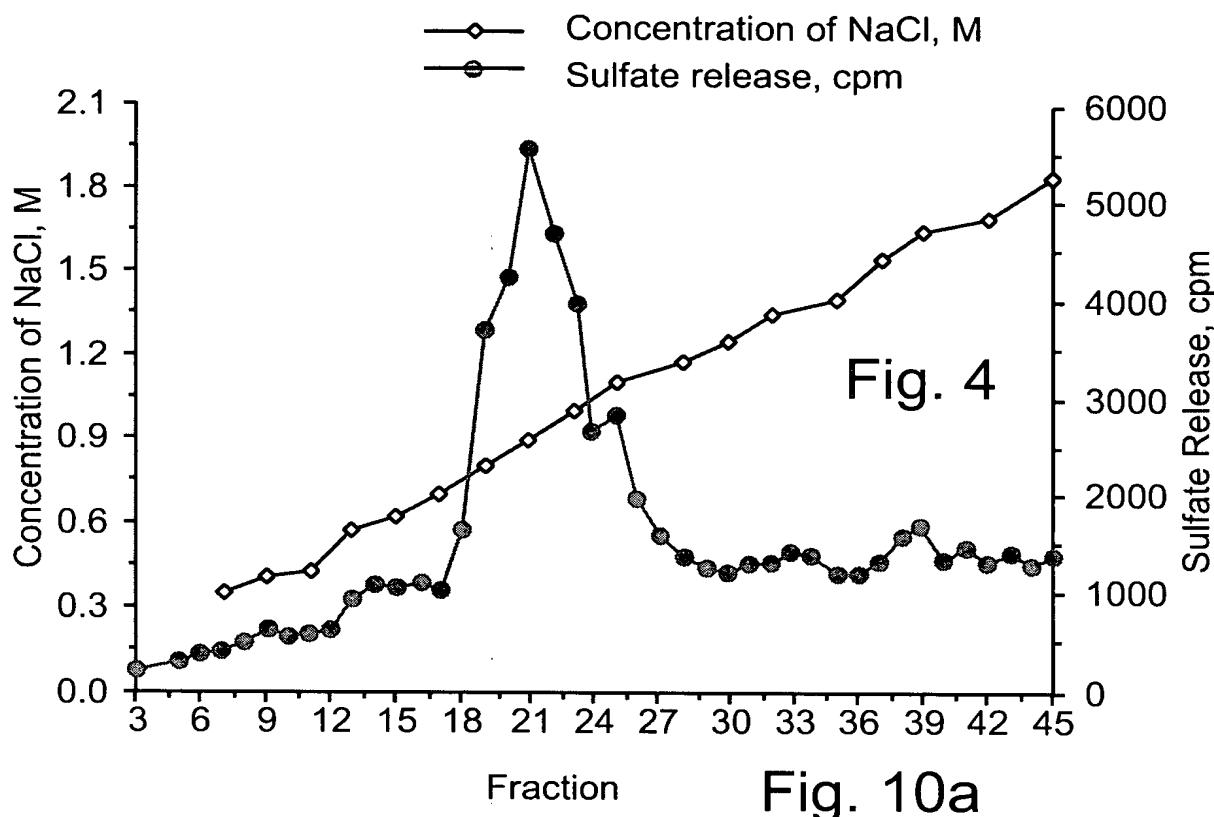
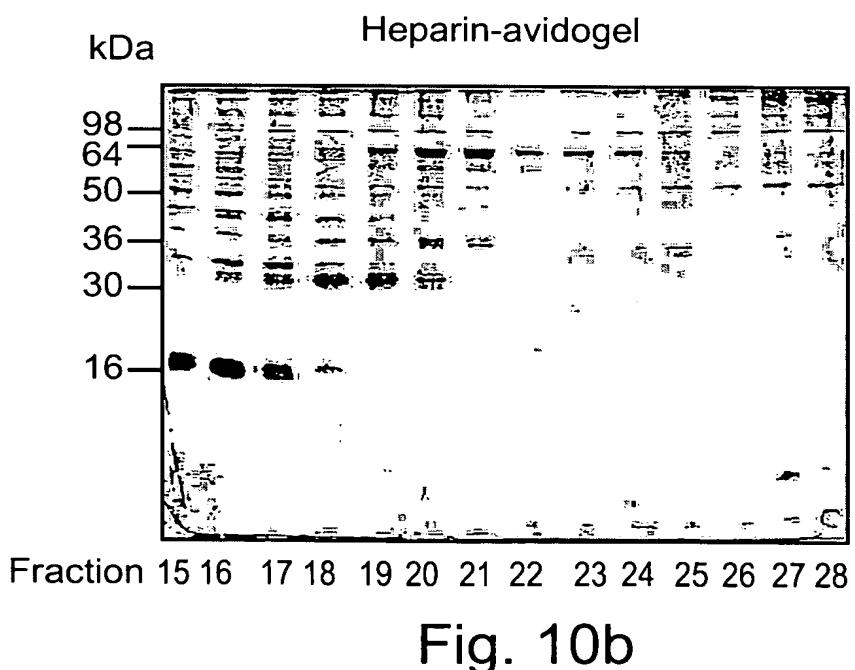


Fig. 10a



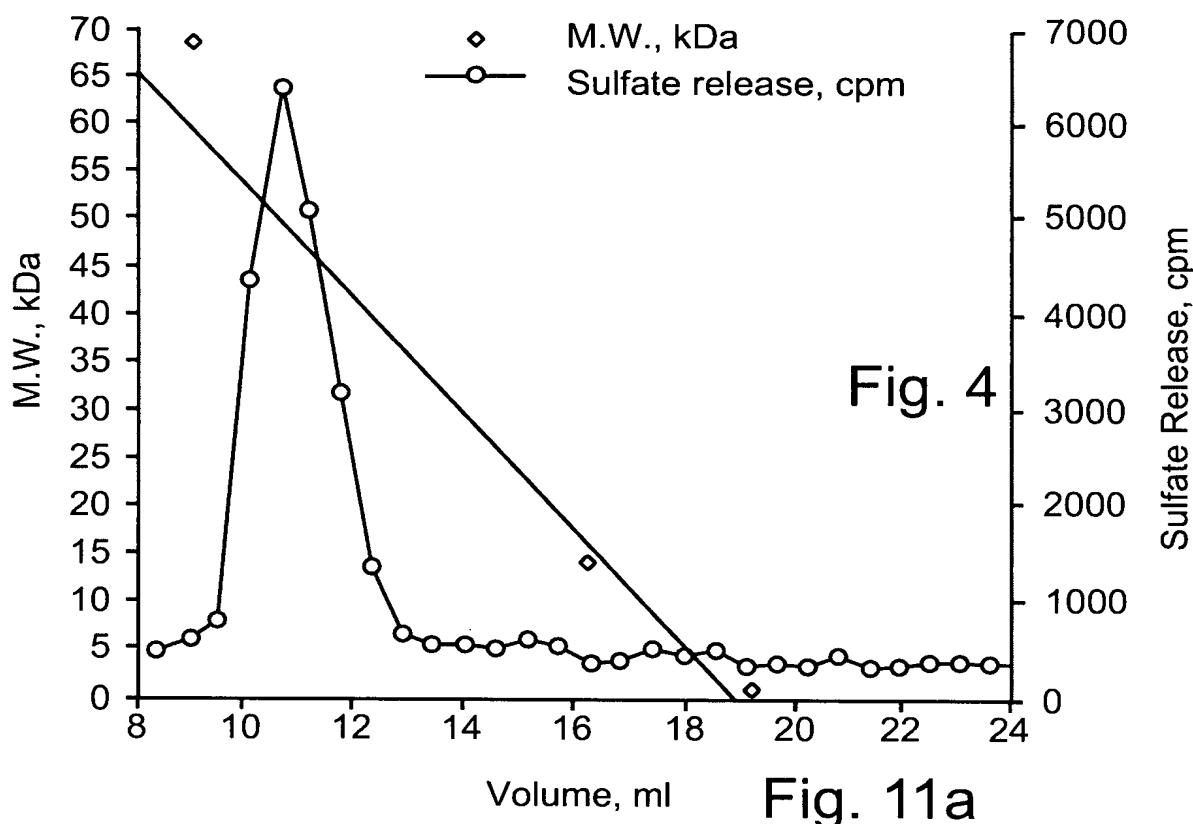


Fig. 4

Fig. 11a

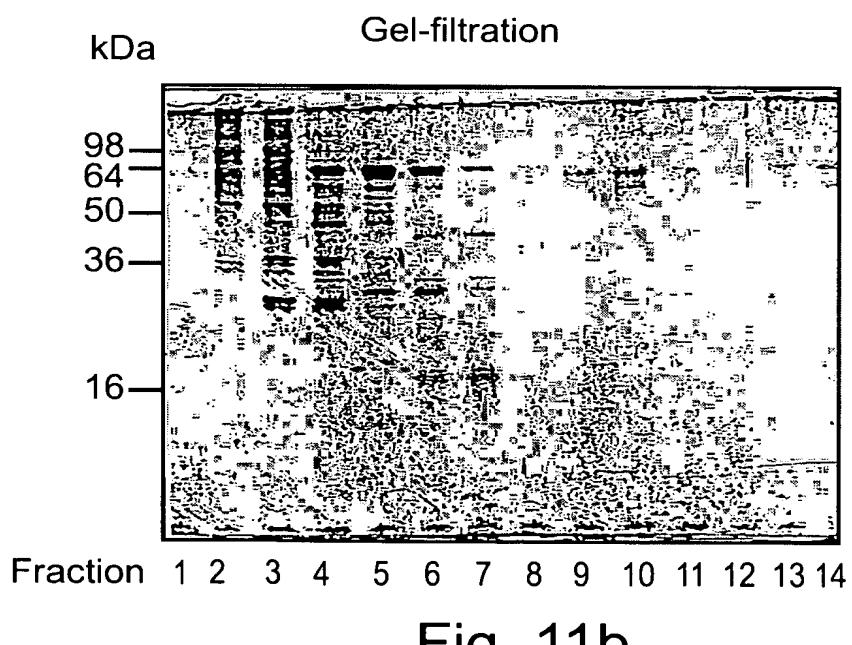


Fig. 11b

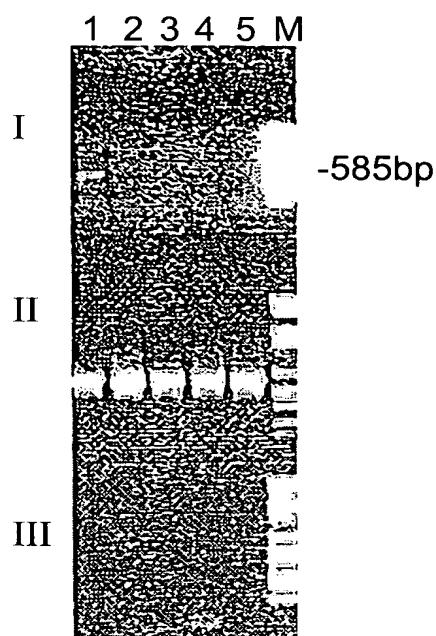


Fig. 12a

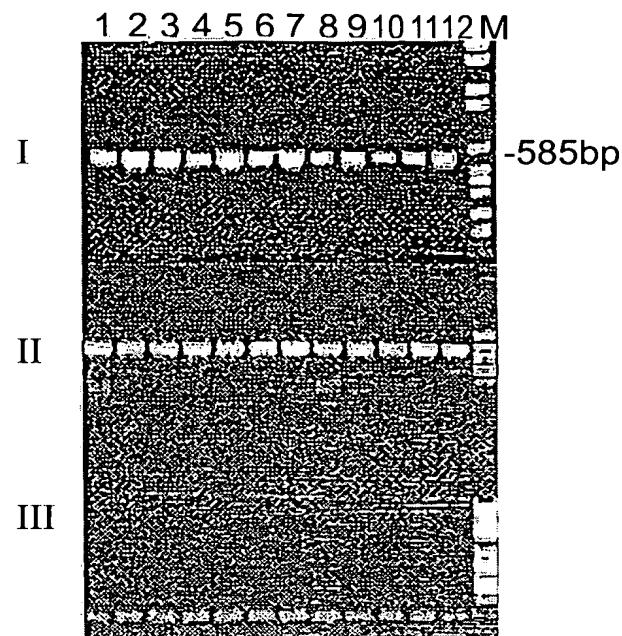


Fig. 12b

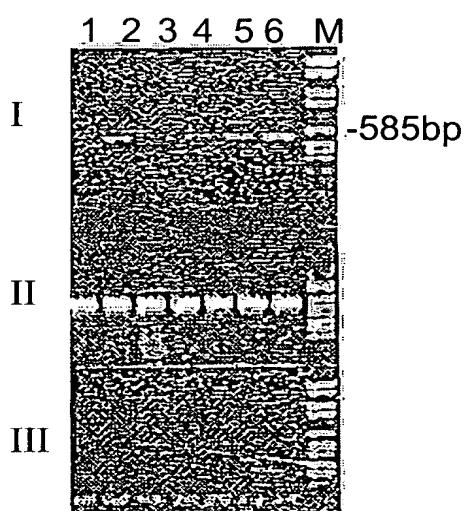


Fig. 12c

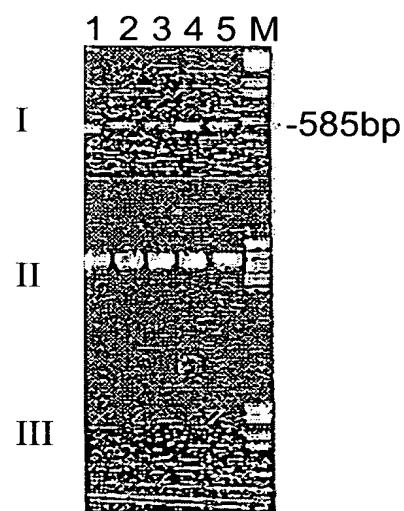


Fig. 12d



Fig. 12e

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mouse	GCACCCCTTGCTGCTGCAACACCTTTCGAGCTGGCTTATGTGGCTGGATA	100
human	GCGCCCTTGCTATCCGACACACCTTGCAGCTGGCTTATGTGGCTGGATA	1165
mouse	ATTGGCCCTGTCAGGCCAGATGGCATAGAAAGTCGTGATGAGGCAGGGT	150
human	ATTGGCCCTGTCAGGCCGAATGGAAATAGAAAGTGGTATGAGGCAAGTAT	1215
mouse	TCTTCGGCAGGAACTTACCACTTAGTGGATGAAACTTGTAGCCTTA	200
human	TCTTTCGGCAGGAAACTTACCACTTAGTGGATGAAACTTGTAGCCTTA	1265
mouse	CCTGATTACTGGCTCTCTGGTCAAGAAAACCTGGTAGGTCCAGGGT	250
human	CCTGATTAATGGCTATCTCTGGTCAAGAAAATTGGGGCACCAAGGT	1315
mouse	GTTACTGTCAAGAGTGAAGGCCAGACAGGAGCAAACCTCCGAGTGTATC	300
human	GTAAATGGCAAGGGTCAAAGGATCAAAGAGAAGGCTTCGAGTATACC	1365
mouse	TCCACTGCACTAACGTCTATCACCCACGATATCAGGAAGGAGATCTAACT	350
human	TTCATTGCAAAACACTGACAAATCCAAGGTATAAGGAGATTAACT	1415

mouse	CTGATGTCCTGAACCTCCATAATGTCACCAAGCACTTGAAGGTACCGCC	400
human	CTGATGCCATAACCTCCATAACGTACCAAGTACCTGGGGTACCCCTA	1465
mouse	TCCGTTTCAGGAACCACTGGATAACGTACCTCTGAAGCCTCGGGC	450
human	TCCTTTCTAACAGCAAGTGGATAAAATACCTCTAACCTGGGAC	1515
mouse	CGGATGGATTACCTTCCAAATCTGTCCAACTGAACCGGTCAAATTCTGAAG	500
human	CTCATGGATTACCTTCCAAATCTGTCCAACTCAATGGTCTAACTCTAAG	1565
mouse	ATGGTGGATGAGCAGACCCCTGCCAGCTTGCACAGAAAAACCTCCCCGC	550
human	ATGGTGGATGATCAAACCTTGCACCTTTAACGGAAAACCTCTCGGGCC	1615
mouse	AGGAAGTGCACTAAGCCTGCCCTTCCATGGTTTTGTCTAA	600
human	AGGAAGTCACTGGCTTGCAGCTTCTCATATAGTTTGTGATAA	1665
mouse	GAAATGCCAAATCGCTGCTGTATAT <u>GAAATAAA</u>	637
human	GAAATGCCAAAGTTGCTGCTGCAT <u>TGAAATAAA</u>	1702

Fig. 13 (Continued)

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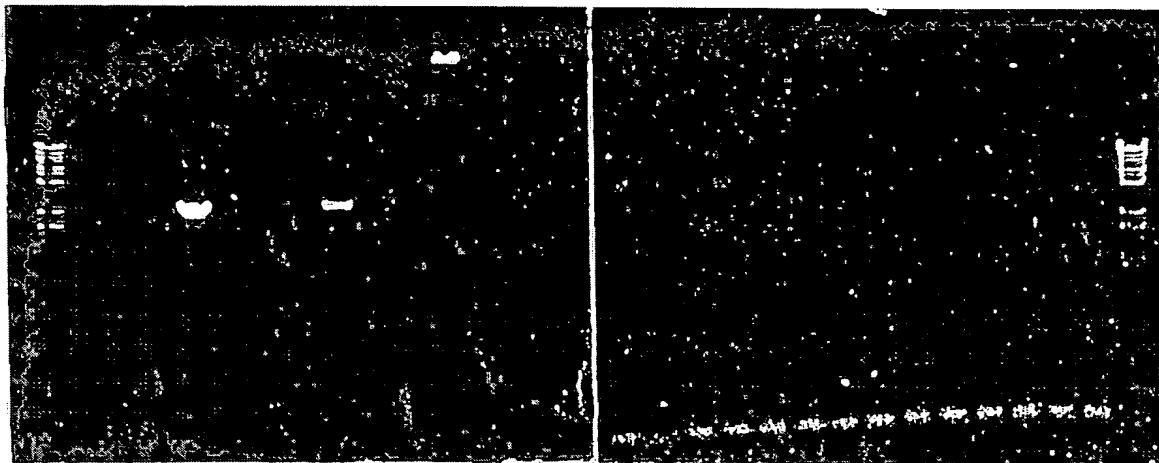


Fig. 14

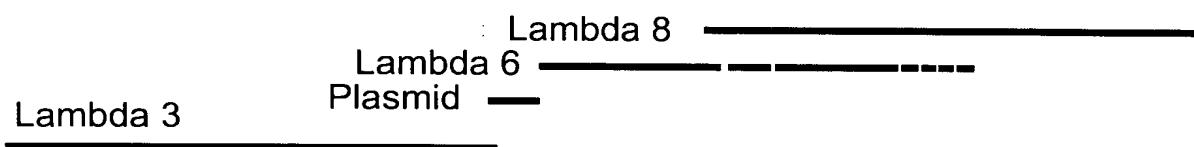
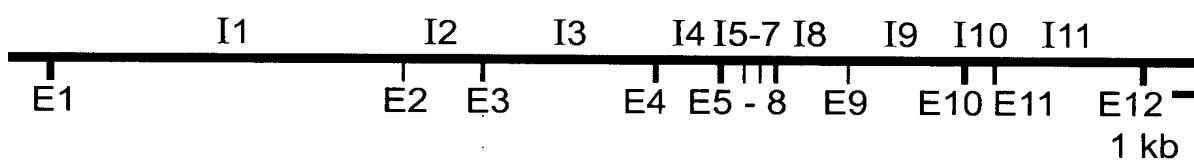


Fig. 15

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1450

**Fig. 16 a**  
**Fig. 16**

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1600  
1650  
1700  
1750  
1800  
1850  
1900  
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2000  
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R S K P A L P P L M L L G

Fig. 16b

Fig. 16c

Fig. 16d

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Fig. 16e

Fig. 16f

Fig. 169

Fig. 16h

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13400  
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Fig. 16i

13450  
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13550  
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13600  
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13650  
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13700  
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13750  
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13800  
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14750  
ca  
14800  
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14850

Fig. 16j

Fig. 161k

Fig. 161

Fig. 16 m

tccaccacccatcaggccctccaaagttctggattacaggcgtgagccacc  
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Fig. 16n

cgcttagcctggcgacaaagttagactctgtctcaaaaaaaaaaaaaacaaaaaaacaa  
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20600 20650 20700 20750 20800 20850 20900 20950 21000 21050 21100 21150 21200 21250 21300 21350 21400 21450 21500 21550 21600 21650 21700 21750 21800 21850 21900 21950 22000 22050 22100

Fig. 160

Fig. 16p

Fig. 16q

ccacacgcggcttaatttttgtttagagacgggtttca  
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Fig. 161

Fig. 16s

ccatggaaacataaagttagctaaaaccacaaattgtgtccaaagaaccaggta 27750  
accaggaggatcacatgtccactgtttcaagacagagtaact 27800  
gatttcttagttacttgcatagaatggactccctcataactcccttcca 27850  
tcttggctttcccttagtagaactttcaccttttagtaacacaggtag 27900  
tggagaggtaagaaggaaataaggtagcagaattaaacccctaaaggcaga 27950  
agtaaaattttgttattttctgtaaatattttctgtaaatttagctac 28000

Y

TATTGAATGGACGGACTGGTACCAAGGAAAGATTCTAAACCCCTGATGT 28050  
Y L N G R T A T R E D F I N P D V  
ATTGGACATTTCATCTGTGCACAAAGTTCCAGgtaaatagtct 28100  
L D I F I S S V Q K V F Q

ttttaaacttttaatgtaaaaccagaatcccttattttatagtcgtata 28150  
9ttcttaaattcttaggttatatttacatgtttcttaatttttaga 28200  
acaaggcactatgacttatccactgttagttttcccttagcattgggtc 28250  
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aagtttgaatgtgttaatcttcaacaccacagttgaaaccacaggta 28500  
gcttttgcaattaccatggataactttctgtttatagGTGGTTGAGA 28550

V V E

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S T R P G K K V W L G E T S S A Y  
GGAGGGCGAGGCCCTTGCTATCCGACACCTTGCAGCTGGCTTATgtg 28650  
G G G A P L L S D T F A A G F M

agtgaaggcaggcgctggccttaggggtcagagtgcagcttccatcct 28700  
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Fig. 16t

Fig. 16u

Fig. 16 v

31850  
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33150  
33200  
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33400

Fig. 16 w

Fig. 16x

Fig. 16 y

Fig. 16Z

Fig. 16aa

39150 ttaagcttaccctttagatatatgttagcatcttttagataaaatatacagc  
39200 tgattaaaggcaataataggcctgtatggataatatcttgcaccatgtacccat  
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39300 ttagccaaaatatccctccaaaaggcatatctaaaactttgtgtgtact  
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39400 gggagatatttcaagacccattttttgtgggtttcctgtatgtggtca  
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40600

Fig. 16bb

Fig. 16cc

A C I \*

gtataactaaggaaactcaaggttataggaaaggaaaggataacct  
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Fig. 16dd

Fig. 16 ee

human	MLRSKPAIP	PPLMLLLGP	GPLSPGALP	RPAQAAQDVVD	LDFFTQEPLH	50
mouse	~~~~~ML	RLLLWLWGP	LGALAAQGAPA	GTAPTDVVVD	LEFYTKRPLR	
rat	~~~~~	~LLLWLWGR	LRALTQGTPA	GTAPTDVVVD	LEFYTKRLFQ	
human	LVSPSFLSVT	IDANLATDPR	FLILIGSPKL	RTLARGLSPA	YLRFGGTKTD	100
mouse	SVSPSFLSIT	IDASLATDPR	FLTFLGSPLR	RALARGLSPA	YLRFGGTKTD	
rat	SVSPSFLSIT	IDASLATDPR	FLTFISSLSPRL	RALSRLGLSPA	YLRFGGTKTD	
human	FLIFDPKKEs	TSEERSYWQS	QVNQDICKYGS	SIPPDVEEKL	RLEWPYQEQQL	150
mouse	FLIFDPDKEP	TSEERSYWKs	QVNHDICRSE	PVSAAVLRLK	QVEWPFQELL	
rat	FLIFDPNNEP	TSEERSYWQS	QDNNDICGSD	RVSADVLS~	~~~~~	
human	LLREHYQKKE	KNSTYSRSSV	DVLYTFANCS	GLDLIFGLNA	LLRTADLQWN	200
mouse	LLREQYQKEF	KNSTYSRSSV	DMLYSFAKCS	GLDLIFGLNA	LLRTPDLRWN	
rat					~~~~~	
human	SSNAQLLLDY	CSSKGYNISW	ELGNNEPNSFL	KKADIFINGS	QLGEDYIQLH	250
mouse	SSNAQLLLDY	CSSKGYNISW	ELGNNEPNSFW	KKAHLIDGL	QLGEDFVELH	
rat					~~~~~	
human	KLLRKSTFRN	AKLYGPDVGQ	PRRKTAKMLK	SFLKAGGEVTI	DSVTWHHYYL	300
mouse	KLLQRSAFQN	AKLYGPDIGQ	PRGKTVKLLR	SFLKAGGEVTI	DSLTVHHYYL	
rat					~~~~~	

Fig. 17

rat					
human	NGRTATREDF	LNPDVLDIFI	SSVQKVTFQVV	ESTRPGKKVV	LGETSSAYGG
mouse	NGRIATKEDF	LSSDLDTFI	LSVQKILKVT	KEITPGKKVV	LGETSSAYGG
rat					
				400	
human	GAPLLSDTEA	AGFMWLDKLG	LSARMGIEVV	MRQVFFGAGN	YHLVDENFDP
mouse	GAPLLSNTEA	AGFMWLDKLG	LSAQMGIEVV	MRQVFFGAGN	YHLVDENFEP
rat					
				450	
human	LPDYWLSSLLF	KKLVGTKVLM	ASVQGSKRKK	LRVYLHCTNT	DNPRTYKEGDL
mouse	LPDYWLSSLLF	KKLVGPRVLL	SRVKGPDRSK	LRVYLHCTNV	YHPRYQEGLD
rat					
				500	
human	TLYAINLHNV	TKYLRLPYPF	SNKQVDKYLL	RPLCPHGLLS	KSVQLNGLTL
mouse	TLYVINLHNV	TKHLKVPPPL	FRKPVDTYLL	KPSGPDGLLS	KSVQLNQGIL
rat					

543  
 KMVDDQTLP **P** LMEKPLRPG SLGLPAFSYS FFVTRNAKVA ACI~  
 KMVDEQTLP **A** LTEKPLPG ALSLPAFSYG FFVTRNAKIA ACI~  
 KMVDEQTXPA LTEKPLPG SLSVPAFSYG FFVTRNAKIA ACI~

Fig. 17  
(continued)

Fig. 17  
(continued)

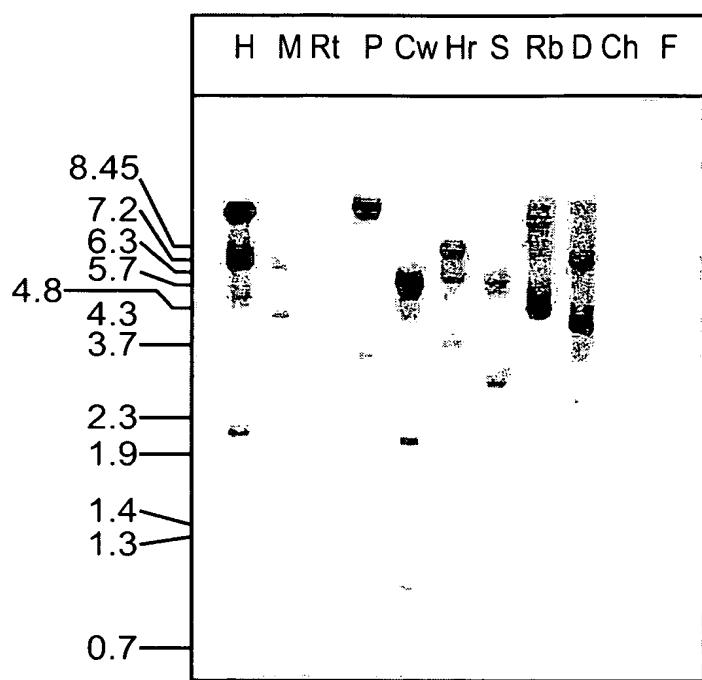


Fig. 18

MLLRSKPALPPPLMLLLGLGPLSPGALPRPAQAQDVVDLDEFTQEPLHLVSPSFLSVT| 60  
 PHD | EEEEE EHH EEEE EEE|

PHD | EEEEEE | HHHHHHH | HHHHHE | EEEEEE | HHHHHHH |

|ASVQGSKRRKLRYVLHCTNDPRYKEGDLTLYAINLHNVTKYLRLPPESNKQVDKYLL| 480  
PHD EEEF E EEEEEEEF EEEEEEE EEEEEEE HHHHHHHHHH

| RPLGPHELLSKSVQLNGLTLKMVDDQTLPPMEKLRPGSSLGIPAFSYSFFVIRNAKVA | 540  
PHD 1H EEEEEE EEEEE EEEEEEE EEE |

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Fig. 19